

Control of Regenerative Braking During a Yaw Stability Control Event

Abstract of Disclosure

The present invention is a method and system to control regenerative braking during the operation of a yaw stability control system. The method and system can use feedback control algorithms to monitor and dynamically modify regenerative and non-regenerative braking. The controller can use a simple proportional-integral-derivative feedback controller. A vehicle yaw stability control system can determine if a vehicle is experiencing an oversteer or understeer condition. The controller compares actual brake balance to a desired brake balance. The controller determines if the front axle wheels are overbraked relative to the rear axle wheels or if the rear axle wheels are overbraked relative to the front axle wheels as compared to the desired brake balance. The controller can adjust regenerative braking and non-regenerative braking levels according to the determinations.

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Figures

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